CHAPTER 6

SELF-REPORT METHODS

KEY POINTS IN THIS CHAPTER

- Self-report methods, such as interviews and questionnaires, ask the person for information directly.
- Their advantage is that they give you the person's own perspective; their disadvantage is that there are potential validity problems (i.e., people may deceive themselves or others).
- The main qualitative self-report approach is the semi-structured interview.
- Qualitative interviewing is a distinct skill, related to but different from clinical interviewing.
- The main quantitative self-report approach is the written questionnaire, but structured interviews and internet surveys are also used.
- There are several principles to follow in constructing quantitative self-report instruments.
- Response sets, such as acquiescence and social desirability, refer to tendencies to respond to items independently of their content. They need to be taken into account when designing and interpreting self-report measures.

When you want to know something about a person, the most natural thing is to ask. Research methods that take the approach of asking the person directly are known as self-report methods, and mainly take the form of interviews, questionnaires, and rating scales. They are the most commonly used type of measure in the social sciences in general and in clinical psychology in particular.

For example, suppose that you have set up a new counseling service for adolescents and want to evaluate its effectiveness. You ask the users to rate the

severity of their problems before and after counseling, using two standardized instruments. You also devise a semi-structured interview to assess the adolescents' overall satisfaction with the service and any specific criticisms they had of it. *Consumer satisfaction studies* like this have become important, with the increased emphasis on accountability to the consumer.

Instead of asking the person directly, you may instead, or in addition, ask someone who knows the person, such as a friend, family member or therapist. This is often called using an *informant* (a term which has unfortunate connotations of sneakiness). It allows you to get the views of someone who knows the person well and who has greater opportunity than you to observe him or her in a natural setting. It is also useful when the respondent cannot give you reliable information. For example, in research with children, it is often useful to have the parents' and the teacher's views of the relevant behavior. This is why, as we discussed in the previous chapter, a more accurate term would be ''verbal-report'' rather than ''self-report.'' However, the term ''self-report'' is commonly used to cover reports from both the person of interest and from other respondents, and we will retain that usage here.

Advantages and Disadvantages

The great advantage of self-report is that it gives you the respondents' own views directly. It gives access to phenomenological data, i.e., respondents' perceptions of themselves and their world, which are unobtainable in any other way. Many psychologists, e.g., Harré (1974) and Kelly (1955), argue that researchers should ask participants for their own views unless there are compelling reasons not to do so. An important principle in Kelly's development of Personal Construct Theory was ''If you do not know what is wrong with a person, ask him, he may tell you'' (quoted in Fransella, 1981: 166). Furthermore, self-report methods can be used to obtain information in situations where observational data are not normally available, e.g., for studying life histories or behavior during a major disaster.

The main disadvantage of self-report is that there are a number of potential validity problems associated with it. The data are personal and idiosyncratic and thus may bear little relationship to ''reality,''as seen by you or others. More importantly, people are not always truthful. They may deceive themselves, such as when an alcoholic cannot admit his dependency to himself, or they may deceive the researcher, such as when a young offender does not want to reveal his socially undesirable thoughts or behavior. Furthermore, research participants may not be able to provide the level of detail, or use the concepts, that the researcher is interested in.

Arguments arising in two separate fields, psychoanalysis and social psychology, cast doubt upon the validity of self-reports. Psychoanalysts emphasize the limits to the person's conscious self-knowledge. They argue that many important feelings and experiences are unconscious, and prevented by defenses such as repression or denial from becoming conscious. Thus, a person's accounts cannot be taken at face value. Some psychoanalytically oriented researchers prefer

projective measures, principally the Thematic Apperception Test (TAT), the Rorschach inkblot test, and sentence completion methods, which are designed to assess the person's unconscious thoughts and feelings, although the validity of these measures can also be hard to establish (Westen et al., 1999).

From the social psychological perspective of attribution theory, Nisbett and his colleagues (e.g., Nisbett & Ross, 1980; Nisbett & Wilson, 1977) have argued that people often do not know what influences their behavior, and that there are pervasive biases in the way that we account for our own and others' behavior. One common source of bias, known as the actor–observer effect, is the tendency for people to say that their own behavior is caused by situational factors and that other people's behavior is caused by dispositional factors (Fiske & Taylor, 1991; Jones & Nisbett, 1971). For example, a student might say that she failed an exam because she did not sleep well the night before, whereas she might say that her roommate failed the exam because she was too lazy to study for it. Another related type of bias, known as self-serving bias, is the tendency to take credit for success and deny responsibility for failure (Fiske & Taylor, 1991).

These strictures about the limits of self-report methods are important to bear in mind. However, this does not mean that all self-report data are invalid, only that they cannot be trusted in all cases (Ericsson & Simon, 1993). All measurement methods have limits, and the potential limitations of the data must be considered at the analysis and interpretation stage. Thus, we should not abandon this method of data collection, although it is often advisable to supplement self-report data with observational data (or at least self-report data from other perspectives). In addition, it is a good idea to be sensitive to the possibilities for self-deception in verbal protocols (see Churchill, 2000, for an example of ''seeing through'' self-deceptive self-reports).

Constructing an interview or questionnaire may appear to be straightforward, but the apparent simplicity is deceptive. Most people have been on the receiving end of an irritating, poorly designed questionnaire or interview, often in the context of market research. Designing good self-report measures is an art and a craft. For this reason, it is preferable, where possible, to use established measures rather than attempting to design your own from scratch. There is a huge literature on research interviews and questionnaires, including several entire books (e.g., Brenner et al., 1985; Kvale, 1996; Moser & Kalton, 1971; Oppenheim, 1992; Patton, 2002; Payne, 1951; Rossi et al., 1983; Sudman & Bradburn, 1982).

Terminology

An *interview* is a special type of conversation aimed at gathering information, although the interviewer usually has a written guide, known as an *interview protocol* or *schedule*. (Note that the interview protocol is not the same thing as the research protocol, which refers to the plan for the study as a whole, including, for example, the research design and the sampling procedure.) Interviews are usually conducted face to face, although occasionally they may be done over the telephone.

A *questionnaire*, on the other hand, refers to a structured series of written questions, which usually generate written responses. *Checklists* and *inventories* (the terms are used almost interchangeably) are a type of questionnaire which present a list of items in a similar format and ask respondents to rate all that apply to them. Two widely used examples of inventories are the Beck Depression Inventory (Beck et al., 1988)—a 21-item scale assessing the severity of depression—and the Symptom Checklist-90 (SCL-90-R: Derogates, 1994), a 90-item checklist measuring the number and severity of psychological symptoms. The questionnaire may be composed of several *subscales*, each of which measures an internally consistent construct (such as the Somatization, Depression, and Hostility subscales of the SCL-90-R).

The term ''survey'' is widely used but imprecisely defined. It usually denotes a systematic study of a medium to large sample done either by interview or postal (''mail-out'') questionnaire. A *census* means a survey of the whole population (as opposed to a sample from that population: see Chapter 10); the best known example is the government population census.

Mode of Administration

Since self-report data may be gathered either by written questionnaires or by interview, researchers need to consider which mode of administration would better suit their purposes. The advantages of written questionnaires are that:

- they are standardized (i.e., the wording is exactly the same each time);
- they allow respondents to fill them out privately, in their own time;
- they can be used to ensure confidentiality, via a code numbering system, and so they can potentially cover embarrassing, socially undesirable or illegal topics (e.g., sexual behavior or drug use); and
- they are cheaper to administer.

The advantages of interviews are that they can use the rapport and flexibility of the relationship between the interviewer and the respondent to enable the interviewer to:

- ask follow-up questions, in order to clarify the respondent's meaning, probe for material that the respondent does not mention spontaneously and get beyond superficial responses;
- ensure that the respondent answers all the questions;
- give more complicated instructions and check that they are understood;
- vary the order of the questions;
- allow the respondents to ask their own questions of the interviewer; and
- allow researchers to gather enough information to make judgments about the validity of informant self-reports.

Interviews are additionally appealing to clinical psychologists because their clinical skills can be used. However, clinicians also have some unlearning to do, as conducting a research interview is quite different from conducting a therapeutic or assessment interview (we will elaborate on this point later).

Open-ended and Closed-ended Questions

Self-report methods can yield either qualitative or quantitative data, depending largely on whether open-ended or closed-ended questions are used.

Open-ended questions are those that do not restrict the answer, which is usually recorded verbatim. For example, the question ''How are you feeling right now?'' might yield the responses ''Fine, thanks,'' ''Like death warmed up'' or ''Better than yesterday, at least.'' However, content analysis may be used at a later stage to classify the responses (e.g., into positive, negative, or neutral). Also, some open-ended questions may yield quantitative data (e.g., ''How old are you?'').

The advantages of open-ended questions are that they enable the researcher to study complex experiences: respondents are able to qualify or explain their answers, and also have the opportunity to express ambivalent or contradictory feelings. Furthermore, their initial responses are potentially less influenced by the researcher's framework. Respondents are free to answer as they wish, using their own spontaneous language.

The main disadvantage of open-ended questions, from the researcher's point of view, is that it is more difficult to evaluate the reliability and validity of verbal data. It is hard to ascertain the extent of such potential problems as interviewer bias and variability, and respondent deception, exaggeration, fabrication, and forgetting. It is not that the reliability and validity of qualitative self-report measures are inherently worse, they are just harder to evaluate, so that both the researchers and the readers are more likely to feel on shaky ground. (On the other hand, careful examination of the respondent's manner and word choice can provide important hints about the credibility of verbal data.)

A second issue is that open-ended questions typically generate large amounts of data (the ''data overload'' problem; Miles & Huberman, 1994), which are usually time consuming to analyse. For a start, most qualitative interviews need to be transcribed, which often takes considerable effort (this is where having sufficient funding to pay for transcription can save the researcher time and frustration). Furthermore, the analysis itself requires considerable effort and skill. This will be considered further in Chapter 12, where we cover the analysis and interpretation of qualitative data.

A final issue is that open-ended questions tend to produce a great variability in the amount of data across respondents. Verbally fluent respondents may provide very full answers, while less fluent respondents may find open-ended questions demanding to answer. In particular, open-ended questions in written questionnaires are often left blank, because they require more effort to complete.

Closed-ended questions constrain the answer in some way. Answers are usually recorded in an abbreviated form using a numerical code. For instance, the possible responses to the closed question ''Are you feeling happy, sad, or neither, at the moment?'' might be coded as 1 = ''Happy,'' 2 = ''Sad,'' and 3 = ''Neither/Don't know.'' Responses can be made in the form of a dichotomous choice (i.e., when there are two possible responses, such as Yes/No), a multiple choice (i.e., where the respondent has to choose one response from several possibilities), a rank ordering (i.e., where a number of alternatives have to be put in order of preference or strength of opinion), or ticking one or more applicable items on a checklist.

The advantages of closed-ended questions are that the responses are easier to analyse, quantify, and compare across respondents. They also help to prompt respondents about the possible range of responses.

The major disadvantages of closed-ended questions are succinctly summarized by Sheatsley: ''People understand the questions differently; respondents are forced into what may seem to them an unnatural reply; they have no opportunity to qualify their answers or to explain their opinions more precisely'' (Sheatsley, 1983: 197). For example, in research on stressful life events, information from a checklist measure simply tells you whether an event has occurred, but you have no information about the meaning of the event for the individual. ''The death of a pet'' might mean that the goldfish passed away, or that an elderly person's sole companion has died. A semi-structured life events interview (e.g., that of Brown & Harris, 1978) allows the interviewer to probe further in order to establish the meaning and significance of each reported event. Furthermore, interview or questionnaire studies that consist entirely of closed questions can be an annoying experience for respondents, as they may feel that they are not getting a chance to put their views across, and may resent being controlled by the format.

The following sections examine qualitative and quantitative methods in turn. This structure is mainly for didactic purposes: we do not wish to artificially polarize the two types of methods. In practice, there is a continuum, ranging from unstructured, open-ended methods, through semi-structured interviews or questionnaires, to structured quantitative methods. As we will state repeatedly, it is possible, and often desirable, to combine both qualitative and quantitative procedures within the same study.

QUALITATIVE SELF-REPORT METHODS

- The semi-structured qualitative interview is the most common qualitative self-report method.
- It is usually based on an interview schedule, which lists the major questions to be asked and some possible probes to follow up with.
- The interview style is mostly based on open-ended questions, but can use other active listening responses, such as reflections.

- The interviewer should have an interested stance with a kind of free-floating attention, and attempt not to put words into the respondent's mouth.

For illustrative purposes, we will discuss qualitative self-report methods mostly in the context of the qualitative interview, since the interview is the most frequently used method within the qualitative tradition. However, there are various other qualitative self-report methods, such as: (1) open-ended questionnaires, e.g., the Helpful Aspects of Therapy form (Llewelyn, 1988); (2) personal documents approaches, which use pre-existing written records, such as personal journals (Taylor & Bogdan, 1998); and (3) structured qualitative questionnaires, e.g., the repertory grid (Kelly, 1955), although repertory grids are often analysed quantitatively (see Winter, 1992).

The Qualitative Interview

In addition to using open-ended questions, qualitative interviews are usually loosely structured, and aim to get an in-depth account of the topic (Kvale, 1996; Patton, 2002; Taylor & Bogdan, 1998). They have similarities to psychological assessment and to journalistic interviews (but also important differences, which we will discuss below).

There are several different forms of qualitative interview (Patton, 2002). The most common is the semi-structured interview. Such interviews vary widely in length, from a few minutes to many hours, and take place on one occasion or across many occasions. Most qualitative interviews are one to two hours in length. At the upper end, intensive life story interviewing, described by Taylor and Bogdan (1998), may involve many interviews totaling up to 50 or 120 hours of conversation.

Alternatives to the semi-structured interview include: (1) the informal or unstructured conversational interview, which is most common as an element of participant observation; (2) the standardized open-ended interview, which consists of a uniform set of questions that are always administered in the same order, often with fixed follow-up questions; and (3) the questionnaire-with-follow-up-interview method favored by phenomenological researchers of the Duquesne school (e.g., Giorgi, 1975; Wertz, 1983). In the last, open-ended questionnaires are used to identify promising or representative respondents who are then interviewed in detail.

One other option is to conduct *focus group* interviews (e.g., Kitzinger, 1995; Krueger, 1994). This method, which originated in market research and public opinion polling, involves assembling a small group of respondents. The interviewer interacts with the whole group, following the same kind of semi-structured protocol as in an individual interview. The group format has the advantage of enabling respondents to react to each other's contributions, and thus possibly to explore the topic more deeply. The disadvantages are that the interview is subject to the usual group dynamics, such as conformity pressures, and giving more weight to the opinions of more vocal or prestigious members, which may affect its validity.

A note on terminology: we will tend to use the terms ''respondent'' or ''interviewee'' to refer to the person on the receiving end of the interview. Other possibilities are ''informant'' or ''participant.'' We avoid the term ''subject'' because of its connotations of powerlessness (see Chapter 10). Likewise, there are a number of models of the relationship between the interviewer and interviewee. These range from traditional ''subject'' models, in which the interviewee is seen as a passive information provider responding to the researcher's questions, to ''co-researcher'' models, as in feminist (Oakley, 1981; Wilkinson, 1986) or New Paradigm (Reason & Rowan, 1981) research, in which the respondent is seen as an equal partner in the inquiry.

The Interview as a Narrative Process

Qualitative interviewing has increasingly been viewed as a key method for helping respondents ''tell their stories.'' Indeed, narrative psychology has been one of the more important developments in psychology during the last two decades of the 20th century, with many writers proposing narrative as central to human communication and experience (e.g., McLeod, 1997; Murray, in press; Polkinghorne, 1988; Sarbin, 1986). There are many kinds of culturally defined narratives, including narratives of illness, victimization, recovery, faith journey, identity, etc. The urge to tell stories is so strong that qualitative researchers proceed at their peril if they try to ignore the power of narrative.

Many different formulations of narrative structure have been proposed (for a review, see McLeod, 1997), but the most basic narrative structure consists of three things. First, there is a beginning, in which the setting is described (e.g., ''When I was a 18, still living at home . . .''), the main character is introduced (''I had a friend Angel who I used to visit . . .''), and a situation or problem is introduced (''. . . and Angel got cancer''). Second, a series of actions, obstacles, conflicts, reactions, and attempted solutions is described, often leading to a climax or turning point. Third, there is an ending or resolution to the story, often with some attempt to state the point or the person's current perspective (''Anyway, I still think about her; 29 is too young to die!'').

Thus, in a narrative approach to interviewing, the researcher's main job is to help the respondent to tell their story, perhaps beginning with something like, ''I wonder if you could tell me the story of [e.g., when you had your abortion] in as much detail as you feel comfortable giving me.'' Then, the researcher's job is to encourage the respondent to keep going, or to back up and provide missing information if they skip over something. (Narrative also has important therapeutic functions, especially in the treatment of traumatic or other difficult life situations; e.g., McLeod, 1997.)

Sample Interview

The following excerpt from a semi-structured interview comes from a British study of how adults with intellectual disabilities (''mental retardation'' in the US

terminology) and their key workers [case workers] experience the ending of their relationships, for example when staff move away. (The full transcript of the interview is given in Mattison & Pistrang, 2000: 202–217.) The interviewer (I) was a female graduate student in clinical psychology. The respondent (R) was Gill, a female staff member in a community residential setting; she is describing the ending of her relationship with her client Margaret (both names are pseudonyms). This excerpt starts about half way through the interview.

I: So, I wanted to ask you a bit about the guidance or support that you had around that process of preparing to leave.

R: A lot. Well, very good, yeah. The manager was very good. I was lucky, he was a very good manager and he supported me through it. I mean you could say it's like a bereavement in a way. For Margaret it was a bereavement and for myself as well, really. I mean you've lost a good friend, haven't you?

I: Yes, yes, and that sounds really hard.

R: Well you haven't lost them, but you're not having so much contact with them.

I: Yes, and bereavement seems to be a very helpful way of describing some aspects of this process.

R: Yes, I think it is a bereavement, yes. Because it is the loss of a friend. You haven't lost them, but then again. You know, when I first saw her at the club afterwards, I was really sort of choked up, and you sort of want to know all about her. Is she going on holiday? Is she doing this? Is she doing that? And you sort of feel, ''Well I could be organizing that''.You know, you do feel very (laughs)—as you say, it's a bereavement.

I: Yes, and on both sides as well, it sounds like—as much about how you felt as it was about how she felt.

R: Yes, yes, and of course Margaret had to find somebody else really. Because, as I say, she has since attached herself to another member of staff, and she's now in the process of moving, so then again, it will be new staff and a new place to live, and also for Tony [another of Gill's clients].

I: Aha.

R: Because you see this was an old institutional building, and they are all being moved out, in the community, into small housing. So she'll be in a new setting, new staff, new people, you know, new people altogether. So that's going to be hard, yeah.

I: Yes. I just wondered, you mentioned that she had attached herself to another member of staff. I wonder how that made you feel?

R: A little bit jealous, yes, a little bit jealous. But then again relief, because then you knew she was OK, because she did need that support and somebody to talk to really. Because as I say, she would sit on her bed and just think for hours, and you knew that it was all going round her head, and then she would suddenly wreck her room, for no apparent reason. And we really surmised

that it was just the thoughts that were going through her head, and then suddenly she would just go mad—totally wreck everything.

I: This was around the time you were leaving, or in general?

R: This was in general, so as I say, we knew that she was a very sensitive, thinking lady. And she picked up a lot on atmospheres and things around her, so you've got to be more careful with her then—it sounds terrible—but you've got to be more careful with her than, say, Tony or any of the other clients, because, as I say, she felt things a lot more.

This excerpt illustrates the richness of the data that can come from a qualitative interview, and also gives a foretaste of the ''qualitative overload'' problem that is involved in analysing the material (see Chapter 12). It also gives a picture of how the interviewer carries out her aim—to understand the participant's experience—by using questions to clarify and explore, and reflections to confirm understanding and encourage elaboration. In the following sections, we will look in more detail at the procedures used in conducting qualitative interviews.

The Interview Schedule

The first step is to prepare an interview schedule that lists the important areas to be addressed; it may have some standard questions to be asked. It is usually a good idea to structure the interview around some sort of framework, which could be, for example, conceptual or chronological. The interview typically starts with general questions, as a warm-up. The standard questions need not be covered in a fixed order, but the interview schedule serves as an aide memoire, to remind you what needs to be asked. It is vital to pilot test the interview schedule on a few respondents and revise it accordingly.

Young and Willmott (1957), in their classic study, *Family and Kinship in East London*, describe the use of their interview schedule:

> We used a schedule of questions, but the interviews were much more informal and less standardized than those in the general survey. Answers had to be obtained to all the set questions listed (though not necessarily in the same order), but this did not exhaust the interview. Each couple being in some way different from every other, we endeavored to find out as much as we could about the peculiarities of each couple's experiences and family relationships, using the set questions as leads and following up anything of interest which emerged in the answers to them as the basis for yet further questions. (Young & Willmott, 1957: 207).

For illustration, here is part of an interview schedule, from the Mattison & Pistrang (2000) study on the ending of keyworker (caseworker) relationships, described above. The excerpt includes three central sections of the interview schedule used with staff respondents. However, as Young and Willmott mention, there is not an exact correspondence between the questions in the schedule and those asked by the interviewer: the schedule is a vehicle for enabling the respondent to talk about the important issues.

Excerpt from an interview schedule (Mattison & Pistrang, 2000: 186–187)

Saying goodbye

This section focused on the process of ending the keyworker [caseworker] relationship. It asked about how the client was told and how/whether the client was prepared for the ending.

Can you tell me what happened when you left the post?

What actually happened on the day that you left?

How did the client find out that you were leaving?

What went into your thinking process about deciding to tell (or not to tell)? How did you decide when to tell him/her?

What, if any, preparation do you think the client needed? Did you get any guidance about this from a supervisor or manager?

Looking back on it now, do you think you would do anything differently?

The impact of ending on the client

The aim here was to elicit the participant's view of how his/her departure might have affected the client.

What do you think might have been the impact of your departure on the client?

Did you see him/her at all after you left?

If you had/had not told your client that you were leaving, how do you think s/he would have responded?

The impact of ending on the keyworker

The aim here was to elicit the participant's own feelings about the ending of the keyworking relationship.

What were your own feelings around this time?

What kind of support, if any, did you need around leaving? What support did you get?

Have you had any experiences in the past where important relationships have ended?

Interviewing Style

The interviewer's general stance should be one of empathic and non-judgmental attention, giving the respondent plenty of space to think and talk, and avoiding

leading questions. If you are unclear about anything, probe further, although legal-style interrogation is obviously to be avoided.

In order to be an effective qualitative interviewer, you must start with an attitude of genuine interest in learning from others, in hearing their story, and you must be able to listen to them with tolerance and acceptance. The schizophrenia researcher, John Strauss, realized after 30 years of quantitative research that he had learned very little about the nature of schizophrenia; he felt that he had only really begun to learn when he started to listen to what the patients had to say when he asked them about their experiences (Strauss et al., 1987).

Your therapeutic skills, such as empathy and clinical intuition, come very much to the fore here. However, there must be a clear distinction between research and therapy (or assessment) interviews, as all therapeutic orientations involve interventions which are inappropriate for qualitative interviewing. For instance, it would be wrong to conduct a qualitative interview in cognitive-behavioral style, as this approach, like most therapies, is ultimately aimed at changing the client's thoughts and experiences rather than finding out about them. Even client-centered therapists may engage in too much paraphrasing, which can easily end up putting words in the respondent's mouth. Perhaps a better clinical analogy is the enquiry phase of projective testing (e.g., ''What was it about the card that made you think of a flying pig?''), although this style of questioning does tend to fall into the traditional model of the detached interviewer. In general, clinical assessment interviews are also quite different from research interviews, as the former tend to be aimed at assembling the information into a coherent clinical formulation.

It is important, for two reasons, to tape record the interview. First, notes or memory are prone to inaccuracies and incompleteness. Second, extensive note taking runs the risk of distracting the respondent and interrupting the flow of the interview. Notes may suffice for interviews which are brief and highly structured; in such situations, note taking may also be acceptable to the respondent. However, if you have to interview without a tape recorder, your notes need to clearly identify which parts are the respondent's verbatim statements and which are your own summary. Written notes can also be used as a reminder during the interview, e.g., jotting down a particular phrase used by the respondent that you want to return to later on. In this case, note taking is brief and should be limited to those essential reminders needed to help you conduct the interview. Finally, as we suggested in Chapter 3, it is worth keeping a research journal to record your general impressions of each interview.

Specific Qualitative Interviewing Skills

If one is genuinely motivated to understand and learn about people by interviewing, then a number of technical skills in information gathering and listening become useful. One useful way to describe these skills is in terms of what are called ''response modes'' (Goodman & Dooley, 1976), that is, basic types of interviewer speech acts or responses. These can be divided into three groups:

responses which are essential for qualitative interviewing; supplemental responses which are sometimes useful; and responses which should generally be avoided.

Essential response modes lean heavily on the ''active listening'' responses such as those made famous by client-centered therapy. Thus, two key responses are open questions—to gather information and to encourage the respondent to elaborate—and reflections—to communicate understanding and to encourage further exploration of content. Suggestions to guide the discussion (''Could tell me about . . .'') are also essential for beginning and structuring the interview, while brief acknowledgments (e.g., ''I see'' or ''Uh-huh'') build rapport and help the respondent keep talking. If a more active, paraphrasing style is used, you are more likely to need to account for the interviewer's possible influence on the data when you do your analysis.

Supplemental response modes. In addition, several other types of response are also sometimes useful, although they should not be overused. These include the following: closed questions, which can be used to test out ideas near the end of the interview; self-disclosures, which allow the interviewer to explain his or her goals for the interview and to build rapport by answering questions about him or her self; and reassurances or sympathizing responses (''It's hard''), to encourage openness in the respondent.

Responses to be avoided include problem-solving advisements, which give respondents suggestions about how to solve their problems; interpretations, which try to tell the respondent why they did something or what they actually felt; disagreements or confrontations, which cut off communication by criticizing or putting the respondent down (e.g., do not try to ''catch out'' respondents in contradictions); and giving respondents information (other than information about the structure and purpose of the interview itself).

Useful types of questions. Because questions are so important for organizing and structuring qualitative interviews, it is worth describing some of the most important types, in the order in which they typically occur in a qualitative interview.

- *Entry questions* set the interview up and help the respondent find a useful focus for describing his or her experiences (e.g., ''Can you think of a particular time when you felt that way?'' ''Can you give me a flavor for what it was like for you to go through that?'').
- *Unfolding questions* request information that will help the respondent unfold his or her story for the researcher (cf., Rice & Sapiera, 1984), including questions about activities (''What were you doing at that moment?''), intentions (''What did you want to accomplish?''), feelings (''What did that feel like, when you were standing there, listening to them talk?''), or sensory perceptions (''What were you noticing as you sat there?'').
- *Follow-up probes* are questions that seek further information or clarification about something which the respondent has said. They may be standardized

requests for elaboration. If the interviewer listens carefully to what the respondent says, he or she can probe more selectively when the respondent fails to answer a question clearly or says something which is ambiguous (''What do you mean when you say 'the doctor is like a friend'?'').

- *Construal questions* are usually saved for later in the interview, because they ask the respondent for explanations and evaluations and thus move away from the predominant emphasis on description (''How do you make sense of that?'').
- *Hypothesis-testing questions* are best saved for the end of the interview, in order not to ''lead the witness.'' They can be useful for following up hunches or confirming the interviewer's understandings (''Are you saying that not knowing your diagnosis is what frightened you the most?'').

Qualitative interviewers are sometimes confronted with apparently contradictory information from respondents. This should not necessarily be regarded as evidence of unreliability or invalidity. People will often have multiple, sometimes contradictory, feelings and views. It is a good idea to listen for such contradictions, because they may reflect ambivalent feelings or avoidance of painful experiences. During the interview, you may become aware of possible inconsistencies, which could be: (1) internal, between different parts of the story; (2) external, with another source, e.g., a document or another respondent; or (3) between manifest and latent content, e.g., between the words and the tone of voice. Rather than pouncing on them, it is a good idea to gently and tactfully inquire about them (''That's interesting, it sounds like you've have several different kinds of feelings about your clients. Can you tell me more about that?'').

Finally, as Kvale (1996) cautions, it is important for the researcher to track the relevance of the respondent's answers during the interview, in order to make sure that the research questions are being answered and the meaning of the respondent's statements is clear. Once the interview is transcribed and you sit down to analyse your data, it is generally too late to go back to your respondents in order to ask them to clarify what they meant! It is also important to scrutinize the data from your first interview before embarking on further interviews. This will make you aware of problems with superficial, vague or ambiguous answers, so that you can modify your interview schedule and technique.

QUANTITATIVE SELF-REPORT METHODS

The central quantitative self-report method is the written questionnaire or rating scale.

Questionnaire design may seem simple, but it is not. There is no shortage of badly designed questionnaires in circulation. The central maxim is ''take care of the respondent.''

Most questionnaires use a Likert scale.

Good items are clear, simple, and brief.

There are a number of issues in designing the response scale, e.g., the number of points, the type of anchors, unipolar or bipolar scales.

Response sets, such as acquiescence and social desirability, refer to tendencies to respond to items independently of their content. They need to be taken into account when designing and interpreting self-report measures.

The literature on quantitative self-report methods is enormous, and we can only hope to skim the surface here. More extensive treatments can be found in Butcher (1999), Dawis (1987); Moser and Kalton (1971), Oppenheim (1992), Rossi et al. (1983) and Sudman and Bradburn (1982). For convenience, we will focus on written questionnaires with rating scales; however, everything that we have to say applies equally well to interviews and internet questionnaires designed to yield quantitative data.

As in other places in this book, we will describe the process from the viewpoint of constructing a measure, in order to give readers a better feel for the difficulties that are involved. The central point is that it is not just reliability and validity considerations that need to be taken into account when appraising a measure; it is worth looking closely at the fine detail of how the measure is put together.

Steps in Measure Development

If you are doing research involving a variable that no existing self-report instrument seems to measure satisfactorily, you may need to construct your own measure. This is not a step to be undertaken lightly, as it is time consuming and requires skill to do well. However, because many areas are either under-measured or are poorly measured, this is a common type of research. One often approaches a new research area only to find that no good measures exist, and then ends up by reformulating the research toward developing such a measure. (A common experience of researchers is to discover that such studies are often widely cited and more influential than their other research.)

If you need to construct a measure, the steps are roughly as follows:

- Having done a literature search to make sure that no existing instrument is suitable, develop a first draft of the scale based on theory, pilot qualitative interviews or analysis of existing questionnaires.
- Progressively pilot the scale on respondents nearer and nearer to the intended target population (known as *pretesting*), modifying it accordingly. Expect to take it through several drafts, e.g., first to colleagues, second to friends or support staff (ask them to point out jargon or awkward phrasings), third and fourth to potential respondents. It is often worthwhile running small informal

reliability and possibly factor analyses on a pilot sample of 20 or 30 respondents to see whether any items should be dropped or added before doing the larger, formal study.

- Once a satisfactory version of the scale has been developed, do a formal reliability study by giving the measure to a large sample (e.g., over 120 respondents) drawn from a population which approximates the population you are interested in. You can then examine its item characteristics (e.g., means and standard deviations), internal consistency and factor structure. It is also typical to administer the measure twice to some of the participants, in order to assess its test-retest reliability.
- If the reliability and factor structure are satisfactory, you can conduct appropriate validity studies (see Chapter 4), which examine the measure's correlations with other criteria or constructs. (These studies may also be combined with the previous step.) The new measure is administered, along with a set of similar and different measures, such as a social desirability measure and measures that should not correlate with the new measure (to establish discriminant validity). It is also a good idea to use measures of more than one type or perspective, in order to reduce the problem of method variance (e.g., to use self-report measures plus observer ratings). The goal is to see whether the measure fits in with the pattern of correlations that would be predicted by the theoretical framework from which it was derived.

Questionnaire Design

Designing a questionnaire involves deciding on the topics to be covered and their sequence, writing the questions or items, and selecting an appropriate response scale. We will deal with each of these in turn.

In all aspects of questionnaire design, the golden rule is ''take care of the respondents.'' Put yourself in their shoes and ask what the experience of being on the receiving end of the questionnaire is like. Make it as easy and free of frustration as possible. As part of the pilot testing, it is a good idea to fill out your questionnaire yourself (often a salutary experience) and give it to a few friends who will be able to give you constructive criticism.

The goal is to not get in the way of respondents' being able to communicate their thoughts and experiences. Trying not to alienate your respondents makes sense not only from a general human relations point of view, but it also makes good scientific sense. Irritated people will not give you good data (or even any data at all—they may just throw away your questionnaire).

Topic Coverage and Sequence

The questionnaire is often broken into subsections representing different topics or variables. The primary consideration is that, as a whole, it should adequately capture all of the concepts needed to answer the research questions. In other

words, the data set should yield an answer to each of the research questions, or enable each of the hypotheses to be tested. Once this coverage has been achieved, the issue is then how to order the topic areas within the questionnaire.

It is usually better to start off with easy, non-threatening, questions that all respondents can answer (Dillman, 2000). This engages the respondents and helps to establish rapport with them: even a written questionnaire is a form of interpersonal relationship. Demographic questions (i.e., about the respondent's age, sex, etc.) should usually be placed at the end of the questionnaire, as it is better to start with questions relevant to the topic of the interview.

Structured interviews often adopt the so-called *funnel approach*, i.e., they start out broadly and then progressively narrow down. This reduces the risk of suggesting ideas to the respondents or influencing their answers. The interview typically begins with open-ended questions, then moves in the direction of increasing specificity. The veteran pollster George Gallup (see Sheatsley, 1983) recommends the following ordering for public opinion research (e.g., to study opinions about sexual harassment): (1) test the respondents' awareness of, or knowledge about, the issue; then (2) ask about their level of interest or concern; then (3) about their attitudes; then (4) about the reasons for these attitudes; and finally (5) about the strength of their opinions.

Item Wording

Having established the coverage of topics, the next step is to write the individual questions or items. The wording of an item is of crucial importance, as the way that a question is phrased can determine the kind of response that is given (Sudman & Bradburn, 1982). It is worth heeding some key principles of item construction:

Neutrality. The language of the item should not influence the respondent, i.e., it should not suggest an answer. Possible errors take the form of *leading questions* (questions which are not neutral, which suggest an answer), questions with *implicit premises* (built-in assumptions that indicate the questioner's viewpoint) and *loaded words or phrases* (ones that are emotionally colored and suggest an automatic feeling of approval or disapproval). Some examples of such problematic questions follow, with commentary after each:

> ''Do you think that . . . ?'' and ''Don't you think that . . . ?''

These are leading questions that pull for a ''yes'' response.

> ''When did you stop beating your wife?''

This has become the clichéd example of an implicit assumption; it assumes the respondent has been beating his wife (Payne, 1951). Such questions are usually to be avoided. However, there are times when implicit premises are useful for

normalizing behavior, by giving the respondent permission to talk honestly. For example, studies of sexual behavior may sometimes use questions such as: ''How old were you the first time you . . . ?'', rather than saying ''Did you ever . . . ?''

''How often do you refer to a counselor?''

This question is a subtler variant of the implicit premise; it assumes that the respondent does refer to a counselor. It would be better to include ''if at all, or, even better, to have two separate questions, e.g. ''Do you refer . . . ?'' and ''If yes, how often . . . ?''

''Why don't you refer to a counselor more often?''

This question assumes that referring more often is desirable. A better question would be: ''What factors influence your referral decisions?''

''How often did you break down and cry?''

''Break down'' is a loaded phrase which gives crying a negative connotation. In this case, it could simply be omitted.

Clarity and simplicity. It is better to use simple, clear, everyday language, adopting a conversational tone. Make sure that the item does not demand a reading level or vocabulary that is too advanced for your respondents. In particular, try to avoid psychological jargon (it is helpful to ask a non-psychologist to read your questionnaire to detect it). Psychologists often become so used to their own technical language that they often forget that members of the public do not understand it or find it strange. This is another reason why it is vital to pilot the questionnaire on non-specialist people.

Specificity. Lack of specificity gives rise to *ambiguities*, e.g.:

''Do you ever suffer from emotional problems?''

The phrase ''emotional problems'' means different things to different people. Therefore, it is better to define it or use alternatives. On the other hand, you could leave the phrase as it is, if you want to leave it open to people's own interpretations.

''Do you suffer from back pain?''

It is better to give a time frame, e.g., ''in the last four weeks,'' and also to specify the anatomical area, perhaps with the aid of a diagram (since, for example, respondents may not know if shoulder or neck pain should be included).

''Do you like Kipling?'' (''Yes, I kipple all the time.'')

People will often respond to a question that they do not understand, rather than saying explicitly that they do not understand it.

Single questions. It is better to ask one thing at a time. Problems arise with *double-barreled questions*, i.e., ones with two independent parts:

> ''Were you satisfied with the supervision and range of experience at your last clinical placement?''

The respondent could be satisfied with the supervision, but not the range of experience.

> ''Were you satisfied with your placement or were there some problems with it?

The two parts are not mutually exclusive: the respondent could be satisfied with a placement even though there were problems with it.

> ''In order to ensure patients take their medication, should psychiatrists be given more powers of compulsory treatment?''

The respondent could disagree with the implications of the initial premise, but agree with the main statement.

Brevity. Short items are preferable. Sentences with multiple clauses can be difficult to process. As a final example of what to avoid, here is a classic of its kind, from no less a figure than the behaviorist John Watson, which violates this and most other principles of item writing:

> Has early home, school, or religious training implanted fixed modes of reacting which are not in line with his present environment—that is, is he easily shocked, for example, at seeing a woman smoke, drink a cocktail or flirt with a man; at card playing; at the fact that many of his associates do not go to church? (Watson, 1919, quoted by Gynther & Green, 1982: 356)

Constructing the Response Scale

With a *rating scale*, the respondent gives a numerical value to some type of judgement. There is a wide variety of scale types: Guttman scales, Thurstone scales, rankings, etc. (Nunnally & Bernstein, 1994). Here we will examine by far the most commonly used one, the Likert scale (see Figure 6.1 for some examples).

Just as the form of the question can influence the response, so can the form of the response scale (Schwartz, 1999). The major considerations in constructing response scales are:

How many scale points? The number of scale points can range from two upwards. (Scales with two choices are known as *binary* or *dichotomous*, with three or more, *multiple choice*.) There may be logical reasons for using a certain number of responses: e.g., some questions clearly demand a yes/no answer. However, it is

Agreement

How much do you agree or disagree with each of the following statements?

1	2	3	4	5	6	7
Disagree strongly	Disagree moderately	Disagree mildly	Neither agree nor disagree	Agree mildly	Agree moderately	Agree strongly

Frequency

How often do you . . . ?

0	1	2	3	4
Never	Seldom	Sometimes	Often	Very often

Quantity/proportion	**Degree/strength**
How many . . . ?	How (much) . . . ?
0 None	0 Not at all
1 Very few	1 Slightly
2 Some	2 Moderately
3 Very many	3 Very (much)
4 All	

Figure 6.1 Examples of anchor words for Likert scales

more frequently the case that the response scale must be decided by the researcher. The main issues are:

- The reliability increases with more scale points (Nunnally & Bernstein, 1994), although there seem to be diminishing returns beyond five points (Lissitz & Green, 1975). In addition, most people find it difficult to discriminate more than about seven points.
- People tend to avoid the extreme ends of scales, a phenomenon known as the *central tendency*. This means that it is usually better to have at least five scale points, because if you have three or four you tend to get a lot of responses in the middle.
- Instead of using discrete scale points, another approach is to ask respondents to put a mark on a 10 centimeter line (a *visual-analog scale*), and then use a ruler to make the measurement (McCormack et al., 1988). This is used, for example, in pain research, to assess the intensity of the respondent's pain experience.

Unipolar or bipolar. Response scales can either be unipolar or bipolar. A *unipolar* scale has only one construct, which varies in degree. For example, a scale measuring intensity of pain might range from ''No pain at all'' to ''Unbearable

pain.'' A *bipolar* scale has opposite descriptors at each end of the scale (e.g., ''Active'' at one end and ''Passive'' at the other). In Figure 6.1, the Agreement scale is bipolar; the others are unipolar.

Mid-point. Bipolar scales may or may not have a mid-point, representing such options as ''Don't know,'' ''Neutral,'' or ''Neither one way or the other.'' In other words, they may have either an odd or an even number of steps.

The argument against having a mid-point is that people usually hold an opinion, one way or the other, which they will express if you push a little. This procedure is known as *forced choice*: e.g., ''Do you agree or disagree with the following statements?'' Forced choice makes data analysis easier, because respondents can be divided into those expressing a positive and those expressing a negative opinion. However, if a question is worded well you should not get a lot of middle responses in the first place.

The argument for having a mid-point is that neutrality represents a genuine alternative judgment and so it is coercive not to allow respondents to express their opinions in the way that they want to.

Anchoring. Anchoring refers to labeling the points of the scale in words as well as numbers. You usually want to define the steps explicitly, so that people are rating to the same criteria. However, this does make two measurement assumptions: (1) that the scale has interval properties (see Chapter 4), i.e., that its steps are all equal (for example, that the distance between ''not at all'' and ''slightly'' is the same as between ''very'' and ''extremely''); and (2) that people understand the same thing by all the adjectives. Try to avoid modifiers with imprecise meanings, e.g., ''quite'' can sometimes intensify (equivalent to ''very'') and sometimes diminish (equivalent to ''somewhat'').

Sometimes researchers just anchor the end-points of the scales, as in visual-analog scales and *semantic differentials* (which use pairs of bipolar adjectives, such as good–bad, hard–soft, heavy–light). It is also possible to anchor alternate scale points as a compromise between anchoring every point and only anchoring the extremes.

Response Sets

Response sets refer to the tendency of individuals to respond to items in ways not specifically related to their content (Nunnally & Bernstein, 1994; Bradburn, 1983). They may be conceptualized as personality variables in their own right. The most commonly encountered response sets are acquiescence and social desirability.

Acquiescence (''yea-saying'') refers to a tendency to agree rather than disagree. The classic example of acquiescence problems is with the California F-scale (Adorno et al., 1950), which was developed to measure authoritarian tendencies (the F stands for fascist). Early *item-reversal studies*, in which some of the items were replaced by their inverse, seemed to show that this scale was mostly measuring acquiescence rather than authoritarianism (although there is some dispute about this conclusion, see Rorer, 1965).

The way to get around acquiescence problems is to have an equal number of positively and negatively scored items in the scale. For example, in an assertiveness scale, the item ''If someone jumps to the head of the queue, I would speak up'' would be scored in the positive direction, while ''I tend to go along with other people's views'' would be scored in the negative direction. Thus, when the items are reversed and averaged, any tendencies to acquiesce would cancel themselves out.

Acquiescence has been noted as a particular problem when working with people with mental retardation (''intellectual disabilities'' in the UK terminology). The title of Sigelman et al.'s (1981) paper, ''When in doubt, say yes,'' is often quoted in this context. Sigelman et al. recommend some guidelines for good practice, for example, that researchers avoid ''yes/no'' questions and instead use open-ended questions with this population. However, Rapley and Antaki (1996) argue, from a conversation analysis point of view, that the assumption of an acquiescence bias in people with mental retardation is not fully substantiated by the evidence.

Social desirability refers to a tendency to answer in a socially acceptable way (''faking good''), either consciously or unconsciously (Crowne & Marlowe, 1960, 1964). This is especially a problem in occupational testing, as the following humorous advice for aspiring businessmen illustrates (it also embodies an old-fashioned assumption that business executives are always men):

> When an individual is commanded by an organization to reveal his innermost feelings, he has a duty to himself to give answers that serve his self interest rather than that of The Organization. In a word, he should cheat . . . Most people cheat anyway on such tests. Why then, do it ineptly? . . . When in doubt about the most beneficial answer, repeat to yourself: I loved my father and my mother, but my father a little bit more. I like things pretty much the way they are. I never worry about anything. (Whyte, 1959: 450, quoted in Crowne & Marlowe, 1964)

In clinical research, it is also important to consider the opposite tendency, i.e., where respondents may attempt to ''fake bad.'' This may occur in forensic contexts, when offenders may be trying to obtain a lighter sentence or a softer prison regime; in the case of insurance claims for psychological trauma, where people may be attempting to get a larger settlement; or in the context of being on a waiting list for psychological therapy, where clients may be trying to get help sooner.

Possible ways to get around social desirability problems are:

- Embed a social desirability scale within the main instrument, such as the Marlowe-Crowne (1960) Social Desirability Scale, the L (Lie) scale on the Eysenck Personality Questionnaire (EPQ: Eysenck & Eysenck, 1975) and the Minnesota Multiphasic Personality Inventory (MMPI: Hathaway & McKinley, 1951), and the K (Defensiveness) scale on the MMPI. These provide a direct measure of the extent of socially desirable responding. Factor-analytic studies have found these scales to have two separate components, self-deception and impression management (Paulhus, 1984).

- Use a forced choice format, where the respondent chooses between alternatives of equal social desirability. For example, the Edwards Personal Preference Scale (Edwards, 1953), which measures personality dimensions such as achievement and affiliation, has paired items balanced for social desirability, e.g., ''I like to talk about myself to others'' is paired with ''I like to work towards some goal that I have set for myself''. (Items are copyright of The Psychological Corporation, New York.) However, some respondents may object to the constraining nature of such instruments.
- Use ''subtle items,'' on which the acceptability of the response is not apparent, e.g., on the MMPI (Weiner, 1948). However, this practice raises questions about the face validity of the scale, and is not without controversy (Hollrah et al., 1995).

Assembling the Questionnaire and Looking Ahead

Having designed the questions and response scales, the final task is to assemble them into a coherent questionnaire. Once again, the maxim ''take care of the respondent'' should be primary. Try to make the experience of completing the questionnaire as engaging as possible, and minimize anything which might exhaust or irritate respondents.

Make the questionnaire look attractive by giving it a pleasing layout with readable typefaces, and use language which is easily understandable and welcoming. It also helps respondents work through the questionnaire if the topics are ordered in a logical sequence, and the transitions between different topic areas are made as smooth as possible. Simple things, such as introducing each section with phrases like ''This section asks about . . .,'' can make the respondent's task easier.

Think about data analysis before the final draft, as you may want to print data entry instructions on to the questionnaire. If possible, try some quick analyses to examine your main research questions on the pilot sample.

We will deal with sampling in general in Chapter 10, but there are some issues specific to mail surveys. Dillman (2000) suggests aiming for a response rate of over 60%, and sending out reminder letters to increase the initial response. Bear in mind that people who return questionnaires are not usually representative of the whole target population: they tend to be higher on literacy, general education, and motivation. In order to conceptualize what would lead to sample bias, ask yourself why someone would not fill out the questionnaire. It is sometimes possible to estimate bias by comparing respondents with non-respondents on key variables. For instance, in a client satisfaction survey, it may be possible to see if the clients who filled out the survey questionnaire differed from those who did not, in terms of severity of problems or length of time in therapy.

A recent development in questionnaire research is the internet-based questionnaire (Dillman, 2000). Using HTML and database technology, web-savvy researchers can set up their questionnaires as forms to be completed on-line.

For the less technically inclined, prospective participants can be identified and approached via the internet; people who agree to complete the questionnaire can then have it delivered by email (as an attached file); respondents can return their forms in the same way. The internet has the advantage of providing access to a wider potential sample of respondents, particularly important with difficult-to-access populations. For example, Barry et al. (2000) found that Arab respondents were more willing to respond when approached in this way than face to face, although respondents recruited via the internet did not appear to differ from those obtained in the usual way.

Integrating Qualitative and Quantitative Self-report Methods

It is worth re-emphasizing that our separation of interview and questionnaire, and qualitative and quantitative methods was for didactic, not practical, purposes. Our view is that all combinations of self-report/observational, qualitative/quantitative data collection methods have their uses. It is possible to use written questionnaires within observational protocols and to combine open-ended and closed-ended questions in the same questionnaire or interview. For example, it is often a good idea to begin and end structured quantitative interviews with general open-ended questions. Questions at the beginning give the respondents a chance to talk before they have been influenced by the researcher's framework, and questions at the end give them a chance to add anything that may not have been addressed within that framework.

CHAPTER SUMMARY

This chapter has covered the procedures for constructing self-report methods, such as interviews and questionnaires. The advantages of self-report are that it gives the person's own perspective, and that there is no other way to access the person's own experience. Its disadvantage is that there are potential validity problems: people's reports may contain errors due to deception, inaccurate recall, or the unavailability of the information to conscious processing.

There are both qualitative and quantitative approaches to self-report. The main qualitative self-report approach is the semi-structured interview. This allows a flexible interview style, with probes where necessary, and helps respondents describe their own experience in their own words. Qualitative interviewing is a distinct skill, different from clinical interviewing, including interviewing for psychological assessment.

The main quantitative self-report approach is the written questionnaire, using a Likert scale. There are a number of principles to follow in constructing quantitative self-report instruments, both concerning the wording of the items and the form of the response scale. Response sets, such as acquiescence and social desirability, refer to tendencies to respond to items independently of their content. They need to be taken into account when designing and interpreting self-report measures.

Although we have discussed qualitative and quantitative approaches separately, they can easily and fruitfully be combined within a single interview or questionnaire, or within a study as a whole.

FURTHER READING

Smith (1995) gives a brief overview of the qualitative semi-structured interview, and Kvale (1996) has a book-length account. Qualitative self-report procedures, and some illustrative studies, are described in the relevant chapters of Patton (2002) and Taylor and Bogdan (1998). Moser and Kalton (1971) is a classic text on the social survey approach to questionnaires. Rossi et al. (1983) provide a useful collection of chapters by eminent authorities; the chapters by Bradburn on response effects, Sheatsley on questionnaire construction, and Dillman on self-administered questionnaires are well worth consulting (Dillman's material can also be found in his 2000 book). Dawis (1987) reviews scale construction methods in the counseling psychology context.